

**ABSTRACT**

A firearm is provided with a weapon operating system for firing large cartridges. The firearm may be a shoulder-fired, multi-shot, semiautomatic grenade launcher for firing grenade cartridges. The grenade launcher includes a magazine with a receptacle that holds one or more cartridges, a barrel, and a receiver coupled between the magazine and the barrel. The receiver includes a lightweight weapon operating system. Springs may be provided between the receiver and the magazine to isolate the receiver and barrel from the mass of cartridges in the magazine and the mounting resistance. A vernier feed system is disclosed for disengaging stacked cartridges in a tubular magazine from one another. A lifter based cartridge feed system is disclosed for magazine round control and/or chambering. A dwell is disclosed for retarding the breech lever after it has applied power to the accelerator lever during opening.